

What Is Claimed Is

1. A prosthetic acetabular component for a  
prosthetic total hip joint, said component comprising  
two constructs, one being a metal base construct that  
engages the bone and the other being a polyethylene  
bearing construct that attaches to the metal base  
construct and articulates with a prosthetic femoral  
stem component on the opposing side of the joint,  
where said metal base construct is composed of two  
different metals, a first metal which engages the bone  
surface and a second metal which engages the  
polyethylene bearing construct, with the first metal  
being selected so as to provide a superior  
bone-engaging face, and the second metal being  
selected so as to provide a superior polyethylene-  
engaging face.

2. A prosthetic acetabular component according  
to claim 1 wherein said first metal comprises  
titanium.

3. A prosthetic acetabular component according to claim 1 wherein said first metal comprises a titanium alloy.

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4. A prosthetic acetabular component according to claim 1 wherein said first metal comprises tantalum.

5. A prosthetic acetabular component according to claim 1 wherein said first metal comprises a tantalum alloy.

6. A prosthetic acetabular component according to claim 1 wherein said first metal comprises a material which is highly biocompatible and which exhibits good bone ingrowth properties.

7. A prosthetic acetabular component according to claim 1 wherein said second metal comprises CoCrMo.

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8. A prosthetic acetabular component according to claim 1 wherein said second metal comprises a cobalt based alloy.

5 9. A prosthetic acetabular component according to claim 1 wherein said second metal comprises a stainless steel.

10 10. A prosthetic acetabular component according to claim 1 wherein said second metal comprises a zirconium based alloy.

15 11. A prosthetic acetabular component according to claim 1 wherein said second metal comprises a material which has relatively high hardness and which is scratch resistant.